

Richland County

Cancer Profile



August 2011

What Is Cancer?

Cancer is the second leading cause of death in the United States and in South Carolina. Cancer is not one disease, but a group of diseases. For example, lung cancer is a completely different disease than colorectal cancer. All cancers have one thing in common, they can grow and spread uncontrollably if not diagnosed at an early stage and properly treated.

Cancer is caused by many things, like smoking, poor diet, and/or family history. The greatest risk factor for any cancer is increasing age. As people age, their risk of getting cancer increases. Men and women have different risks of developing cancer. In the United States, one out of two men and one out of three women will have cancer in his or her lifetime.

What Is Cancer Incidence?

Cancer incidence is a measure of how many new cancer cases occurred in a certain period of time. A cancer incidence rate tells how many people were diagnosed with cancer per 100,000 people in the population. (For example, a cancer incidence rate of 400 means that for every 100,000 people, 400 were diagnosed with cancer).

Incidence rates are age-adjusted, meaning the age structure of the population is taken into account. One county may have a larger number of elderly persons than another county. Adjusting for age differences allows us to compare county rates. Incidence rates are age-adjusted to the 2000 US standard population.

Table 1 shows selected cancers and the total cancers diagnosed in Richland County between 2004 and 2008.

The table shows the number of cases and the age-adjusted rates for these cancers in Richland County and in South Carolina. The last column shows how Richland County ranks in comparison to the other 45 counties in South Carolina. A rank of 1 means that Richland County has the highest rate of any county, while a rank of 46 means that Richland County has the lowest rate of any county.

Table 1. Incidence Data* for Selected Newly Diagnosed Cancers, 2004-2008

Cancer Type	SC	Richland County		Rank
	Age-Adjusted Rate	Age-Adjusted Rate	New Cases	
Breast (Female)	121.0	141.2	1,277	5
Prostate	167.7	183.6	1,255	16
Colon/Rectum	47.9	45.5	705	36
Lung/Bronchus	73.3	73.8	1,110	24
All	477.5	494.7	7,780	11

*Does not include *in situ* cases, except for bladder.

Cancers diagnosed in late stages lessen the potential for successful treatment and raise the risk of premature loss of life. Table 2 shows the percentage of cancers diagnosed in early and late stages of disease in South Carolina and in Richland County.

Table 2. All Cancers by Stage of Diagnosis, 2004-2008

	South Carolina	Richland County
	Percent of all cancers	Percent of all cancers
Early Stage	51	49
Late Stage	39	39
Unknown Stage	11	12

What Is Cancer Mortality?

Cancer mortality is defined as the occurrence of cancer deaths in a certain population within a given time period. Cancer mortality can be reported as either the number of deaths or as a mortality rate. A cancer mortality rate tells how many people died of cancer per 100,000 people in the population. (For example, a cancer mortality rate of 150 means that for every 100,000 people in the population, 150 died from cancer).

Cancer mortality rates are also age-adjusted, meaning that they take into account the age structure of the population. Adjusting for age allows us to compare county rates by removing differences in age structure among the counties. Mortality rates are age-adjusted to the 2000 US standard population.

Cancer mortality data for Richland County for years 2004 to 2008 are shown in Table 3. The table lists selected types of cancer death as well as the total cancer deaths in the county. The number of deaths and age-adjusted death rates for Richland County and South Carolina are shown. The last column shows how the county ranks in comparison to the other 45 counties in South Carolina. A rank of 1 means that Richland County has the highest rate of any county, while a rank of 46 means that Richland County has the lowest rate of any county.

Table 3. Mortality Data for Selected Types of Cancer Death, 2004-2008

	SC	Richland County		
Cancer Type	Age-Adjusted Rate	Age-Adjusted Rate	Deaths	Rank
Breast (Female)	24.2	28.0	250	17
Prostate	28.1	33.1	168	21
Colon/Rectum	17.2	15.7	237	33
Lung/Bronchus	57.7	56.7	836	28
Pancreas	10.8	12.6	192	12
All	190.7	195.1	2,913	25

Impact of Cancer on Your County

In the United States, 1 in 2 men and 1 in 3 women will develop a life threatening cancer during their lifetime. The American Cancer Society (ACS) estimates that over 1,529,560 new cases of cancer will be diagnosed in the United States in 2010. This translates to over 4,191 new diagnoses each day. Furthermore, 569,490 people are expected to die in 2010 from cancer in the United States.

In South Carolina over 23,240 new cases of cancer will be diagnosed in 2010 or over 64 new cancer cases diagnosed each day. Furthermore 9,180 South Carolinians will die from cancer in 2010.

Table 4. Actual Cancer Cases* and Deaths in SC & Richland County, 2008

	South Carolina		Richland County	
	New Cases	Lives Lost	New Cases	Lives Lost
All	22,496	3,628	1,560	606
Male	11,947	2,029	802	354
Female	10,548	1,599	758	252
White	16,828	2,502	899	332
Black	5,223	1,081	625	260

*Does not include *in situ* cases, except for bladder.

As seen in Table 4 there was a total of **1,560** new cancer cases and **606** deaths from cancer during 2008 for Richland County.

Costs of Cancer to Richland County

Using actual cancer cases for Richland County and estimates from the National Institutes of Health, the overall annual cost of cancer in Richland County for was **\$248 million**; **\$101 million** for direct medical costs (total of all health expenditures), **\$20.4 million** for indirect morbidity costs (lost productivity due to illness), and **\$126 million** for indirect mortality costs (lost productivity due to premature death).

Breast Cancer

Breast cancer is the most commonly diagnosed cancer among women in South Carolina. South Carolina ranks 19th in the nation for breast cancer deaths. There were **3,279** new female breast cancer cases diagnosed and **267** deaths during 2011 in South Carolina. Richland County had **260** new female breast cancer cases and **52** breast cancer deaths in 2008. Excellent methods of early detection are available for breast cancer.

Prostate Cancer

Prostate cancer is the most commonly diagnosed cancer among men in South Carolina. South Carolina ranks 4th in the nation for prostate cancer deaths. For South Carolina men, **3,586** new prostate cancer cases were diagnosed, and **189** died from the disease in 2008. In Richland County in 2008 there were **261** new prostate cancer cases with **29** deaths.

Colorectal Cancer

Colorectal cancer is the 4th most common cancer in South Carolina. South Carolina ranks 23rd in the nation for colorectal cancer deaths. There were **2,115** new colorectal cancer cases and **307** colorectal cancer deaths in 2008. In Richland County, there were **140** cases and **40** colorectal cancer deaths in 2008.

Lung Cancer

Lung Cancer is the 3rd most common cancer in South Carolina; currently South Carolina ranks 10th in the nation for lung cancer deaths. In South Carolina there were **3,426** new lung cancer cases diagnosed and **1,051** lung cancer deaths in 2008. There were **221** new cases and **169** lung cancer deaths in 2008 Richland County.

Note:

Data are subject to change as data sets are updated

The following suppression rules have been applied to the data in the text and tables above: (1) Counts of 1-4 are recorded as <5 (2) Counts of 5-9 are rounded to 10 (3) Rates resulting from counts 15 or fewer are suppressed due to the instability of calculating rates using small numbers.

Resources

SC Central Cancer Registry

<http://www.scdhec.gov/co/phis/biostatistics/SCCCR/scccrmain.htm>

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American Cancer Society

<http://www.cancer.org/Research/CancerFactsFigures/CancerFactsFigures/index>

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National Program of Cancer Registries

United States Cancer Statistics

<http://apps.nccd.cdc.gov/uscs/>



